
From: HJR153
Sent: Wednesday, September 15, 2004 11:30 PM
To: HJR153
Subject: HJR153 - Steve Offutt

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Utility Type: all
Company Name: HJR153 - Undergrounding of utilities
Comments: Thank you for allowing me to comment. You listed several issues you would like addressed. I will respond to each of them individually;

The potential benefits associated with undergrounding overhead distribution lines.

Reliability during severe weather events - After Tropical Storm Isabel last year, one clearly apparent benefit is the added reliability that would occur during severe weather events. I do not know if anyone estimated the losses attributable to power outages during and after the storm, but I imagine that economic losses were immense. There may also have been loss of life, injuries or illnesses attributable to the lack of power. Those losses are harder to quantify, but must also be considered.

Long-term weather forecasting points to increasing frequency of Atlantic hurricanes and tropical storms over the next few decades. Undergrounding utilities is one important response society should take to help mitigate the risks associated with these increasingly costly weather events.

Aesthetics - I live in a neighborhood that has overhead utility wires. They blight the visual landscape. In addition to impacting the ambiance of the neighborhood, the overhead wires reduce the value of the homes. Homes in neighborhoods with underground utilities are more aesthetically pleasing and have more reliable service during severe weather, both issues that would add to the value of housing in those neighborhoods. Increased housing values can be translated into a larger real estate tax base for the locality.

Air and water quality - In areas where utilities are underground, there is more potential for and flexibility about the placement of trees. Trees also do not need to be trimmed to accommodate lines; trimming can sometimes compromise the health of trees and can reduce the tree canopy. The value of urban forests continues to rise as the understanding of the value the tree canopy provides becomes better understood. Trees serve several environmental purposes: they cool the ambient air, resulting in lowered demand for air conditioning, which reduces air pollution; they "clean" the air through transpiration; they reduce runoff and hold the soil in place, helping to improve water quality; they provide sound attenuation, helping to make neighborhoods quieter; and other benefits.

The potential negatives associated with undergrounding overhead distribution lines.

Underground utilities are more difficult to service than overhead lines.

It is more expensive to build underground utility lines

In order of importance, a list of criteria for determining whether certain overhead lines are eligible for being relocated underground.

Lines that support important infrastructure and services, such as water treatment, hospitals and emergency shelters

Lines that pose a safety hazard of some kind

Lines serving new construction

Lines serving areas that can be undergrounded as part of other projects, such as street repairs or utility upgrades and repairs

Lines in areas that are prone to outages during severe weather events Lines along major thoroughfares, particularly in areas where undergrounding will serve to protect and enhance the tree canopy and improve aesthetics Lines along other rights of way, particularly in areas where undergrounding will serve to protect and enhance the tree canopy and improve aesthetics

A list of potential options for funding the relocation of overhead distribution lines underground and the reasons for each option. Examples: an increase in rates on all customers, an increase in rates only on customers who directly benefit from undergrounding, a special tax assessment on affected customers.

Utility companies do not currently have any incentives to improve reliability—including undergrounding utilities. This was apparent during and after T. S. Isabel, when Dominion Power lost power to thousands and thousands of customers and was widely criticized for its ability to bring power back on (I was out for over 70 hours myself). Just imagine if it had been a hurricane and not just a tropical storm!

I suggest a policy in which a utility company pays a penalty for service outages based on the time the power is out. A scale of penalties could be developed based on the facility that is being served (e.g., outages at places like nursing homes would incur greater penalties than, say, retail stores). For example, if the utility were required to pay a penalty of \$2 per hour to residential customers for each hour after the first two hours, then a 52 hour outage would result in the customer receiving payment from the utility of \$100, which would help offset spoiled food costs, costs that are currently borne by the resident, but more rightfully ought to be shared with the utility.

These costs should come out of the utility's profits and not be cost recoverable. Utilities would then need to work with their insurance providers to determine policies and premiums that would protect the utility. Both parties would find it in their interest to continuously improve the reliability of the system, without the need for the government to tell them what to do.

Some might argue that the utility should not be responsible for "acts of god" or accidents (such as a car hitting a pole). On the other hand, a policy such as this would force the utility to think in advance about possible "acts of god" or accidents and take the strongest possible measures it could take to reduce the risks associated with them.

The long-term effect of such a policy would result in significant improvements to the utility infrastructure, including undergrounding and also likely to include distributed generation. Also, it would create an ongoing incentive to improve reliability without a command and control system.

If public policy warrants placing underground all or a portion of existing and/or new overhead distribution lines, should the policy be established by state law or local ordinance? Explain why.

I suspect that different parts of the state may have different priorities than others in relation to undergrounding utilities. For that reason, I believe policies should be established in individual localities. The state could play a role in advising localities on how to develop effective policies that meet their needs.

However, if a system such as I proposed above were implemented, the state would need to play a strong role in determining the penalty fees to keep localities from "overbidding" in order to receive higher priority from the utility.